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U.S. DEPARTMENT OF AGRICULTURE
Office of Plant and Operations,
Records Management Division

USDA DIRECTIVES IMPROVEMENT HANDBOOK

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Writer's Guide

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RESERVE

FOREWORD

Directives are important to the Department of Agriculture. They help us all do our jobs better and at less cost. They help the Department do its work.

Directives cost money to write, but they cost much more to read and use. Directives that are hard to read and follow are the most costly of all. It pays to write good directives.

Writers are the key to better directives. Writers should know how important and costly directives are. They should know what improvement in a directive is worth. They should know how to improve their directives.

This Handbook is designed to give writers a great deal of the information they need. Used wisely, it should help them write the kind of directives the Department needs.

DIRECTIVES IMPROVEMENT HANDBOOK
WRITER'S GUIDE

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Chapter 1

INTRODUCTION

THE DIRECTIVES IMPROVEMENT HANDBOOK

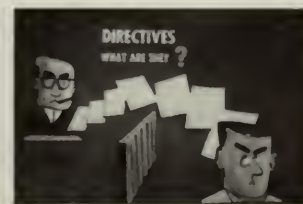
The Directives Improvement Handbook is a writer's guide to better directives. It summarizes the principles taught in USDA Directives Improvement Workshops. The Workshops are a management improvement effort aimed at getting better directives throughout the Department. They do this:

- (1) By helping writers see the need to write better directives;
- (2) By giving writers some simple techniques for improving their writing; and
- (3) By showing writers how to measure the readability of their writing.

Workshop techniques are easy to learn, and are designed to get immediate results.

The Handbook - like the Workshop - deals only with the writing of directives. However, many of the principles apply to other kinds of writing, such as letters and reports. Despite its brevity, it covers a great many of the things a writer needs to know in order to write better.

DIRECTIVES - WHAT ARE THEY?



Directions, when published, become a directive. Directions conveyed by letter to individuals are not usually considered directives. Regulations published in the Federal Register are directives.

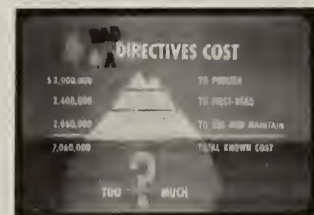
Webster's New Collegiate Dictionary defines a directive as "a general instruction as to procedure."

In the Office of the Secretary, directives are issued in the form of Administrative Regulations, Secretary's Memorandums and staff office memorandums. In individual agencies, they are variously issued as agency memorandums, manuals, handbooks, instructions, notices, and so forth.

Directives perform a number of vital functions in an agency. Keep these in mind when you are writing a directive:

Directives give the signals that make teamwork possible.
Directives provide a production blueprint.
Directives provide an office memory.
Directives provide perpetual supervision.
Directives provide a training aid.

DIRECTIVES ARE COSTLY



What do we mean by the "cost" of directives? Most people think of the publishing cost, because it is the one they know best. GSA estimates that the average page of directive costs \$400 to publish. That includes:

- (1) Planning: \$300. or 75% of the publishing cost.
- (2) Writing: \$75. or 19%.
- (3) Typing, printing, mailing: \$25. or 6%.

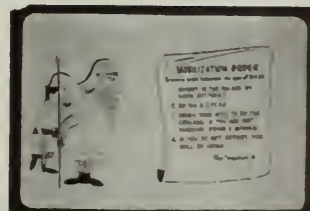
Directives cost money to first-read. GSA suggests a cost of 12¢ per page, per person. This is based on an average reading time of three minutes, at an average pay of \$2.50 per hour. Multiply this by the median number of readers, to get the total first-reading cost for your agency.

Directives cost money to use. An estimated using "real-time" of ten minutes, during a three-year life expectancy, costs 13.3¢ per page, per reader, at the same average pay. Multiply this by the median number of regular users, to get the total using cost for your agency.

Would you like to guess your agency's directives cost? Use the Directives Cost Computation Tables in the Appendix. They will also help you figure the page-cost of a directive, and will show you what improvement in a directive is worth.

Good directives are costly. But they are not as costly as poor directives or no directives. Good directives are a very good investment for any organization.

Good directives are
hard to write





Chapter 2

PLANNING YOUR DIRECTIVE

Good planning is the foundation for a good directive. It is only through careful planning that we can consistently produce the kind of directives our programs and employees need. No amount of skillful writing can save a directive that has been poorly planned.

Insure understanding. Misunderstandings can be costly. They are the main cause of faulty procedures. When you set out to write a directive, be sure you have a clear understanding, with the persons concerned and responsible, about:

1. The background of the problem,
2. The purpose of the directive,
3. Its scope and specific actions,
4. The date the directive is needed.

You can get this understanding by conference or by memorandum.

Collect information systematically. It will help you do a better job. A little effort usually will turn up useful information near at hand. Some common sources are:

1. Existing directives
2. Minutes of meetings
3. Correspondence
4. Audits and surveys
5. Conference notes
6. Travel and work reports

Set realistic deadlines. If the action in a directive is to take place on time, the directive must be issued on time. The writer should take the initiative to see that necessary dealines are set, that they are reasonable, and that they do not conflict. Deadlines should reflect consideration of workloads and time needed to put the directive into effect.

Allow time for worksteps. Important as he is, a writer doesn't get out a directive all by himself. Necessary services are performed by

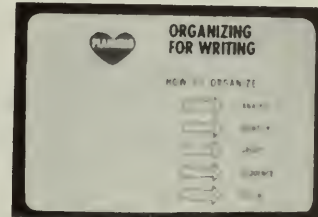
others, and they must be allowed a reasonable time to do them. The writer, more than anyone, should know all of the worksteps involved, and should schedule development of each directive, accordingly.

Organize your writing. Organizing for writing is sometimes regarded as difficult and mysterious, but it needn't be. It is simply the process of:

Identifying ideas,
Assigning values, and
Determining sequence.

The end product of this process is an outline, or framework for your writing.

STEPS IN ORGANIZING TO WRITE



1. Analyze

Before doing any writing, think about the assignment. Analyze the information you have collected. Analyze the operations and the people responsible for them. Ask yourself:

- a. What is the scope of the writing job? What are its objectives? Its limitations? Its priorities?
- b. What guidance do employees need? How much do they already have?
- c. What background or introductory information is required? Or is the needed background information provided by another directive, or by experience.
- d. What illustrations, John Doe forms, etc., will be helpful to support the text?
- e. What is the best way for employees to do this job? What should be mandatory, what optional? How should the tasks, the responsibilities, be divided?

2. Identify

Analysis of a subject nearly always reveals several main topical segments, or divisions. Identify them in your mind, for when you develop them further they will become the main parts or topics in your directive.

3. Group

Next, bring together under each of these main subdivisions all of the minor ideas related to it. As you do this, you are building the content for your main paragraphs and subparagraphs. Limit main paragraphs to a single idea. Make sure:

- a. That subparagraphs are really subordinate; i.e., minor in importance and related to the paragraphs under which they are placed.
- b. That subparagraphs under the same main paragraph are balanced; i.e., similar in value.
- c. That continuity of the main paragraph idea is maintained, and is not side-tracked by unnecessary subparagraphing.
- d. That excessive subordination is avoided. Do not exceed four levels of subordination in each main paragraph.

4. Sequence

This is simply determining the order in which information should be presented, or action prescribed. Sometimes, the basis for dividing the subject will suggest the sequence; e.g., a doing order for action topics.

There are several possible sequence patterns. Some of these are:

- a. The order of doing.
- b. The order of need.
- c. The order of importance.
- d. The order of occurrence.

- e. The order specified in laws, contracts or agreements.

Many directives, especially long ones, need several sequence patterns. Choose sequence patterns that are familiar and most useful to the reader.

5. Outline

This step consists simply of putting the outline of your ideas down on paper. Outlining reveals the shape of your plan. It shows decisions on content and style, and on values and order of presentation. Outlining isn't hard and doesn't take long. It pays to make a habit of it.

Outlining does this for you:

- It helps your thinking.
- It speeds the writing of text.
- It reduces rewriting and revising.
- It prevents duplication and overlaps.
- It assures completeness.
- It results in directives that are easier to follow.

SELECTING FORMAT

Writers often wonder if there is a certain format for directives text that is better than others. There are many writing formats available. Some of them are useful in special situations. However, Federal agencies, generally, have adopted three basic formats. These have been developed through experience, and they lend themselves very well to our own writing needs. The formats are:

1. The block format which is used for policy statements. It is generally reserved for this use, because policy statements do not require detailed structural development and subordination of parts. Organization and background statements, also, fit well into the simple block style of presentation.
2. The outline format is used to explain detailed, or how-to-do-it procedure. It helps employees understand and follow

detailed directions. It can be recognized by its extensive use of subordinations and itemizations.

3. The block-outline format is used for general procedure which involves a combination of policy statements and how-to-do-it procedure. This is typical of many of our directives, for very few of them consist of pure policy, or pure how-to-do-it procedure.

The reason for
planning is to insure - -





Chapter 3

WRITING YOUR DIRECTIVE

What is writing? Calvin Linton and Lee Thayer, both outstanding writers and teachers on the subject of communication, describe writing as "visible thinking." It is visible as words and pictures.

The task of communication (and that is what a directive is) is to transfer meaning - that is, ideas - from one mind to other minds. There are obstacles to this transfer of meaning - differences between individuals which affect their interpretation of words and experiences. The reader can do very little to overcome these obstacles, but the writer can. The writer controls the text - and, thus, he controls the transfer of meaning. He does it through his choice and use of the right words and pictures.

Let's look at some of the general rules that govern word choice:

Use simple words. Words stand for ideas. The more complex our ideas are, the more important it is to express them simply. When we use difficult words to express even simple ideas, we add unnecessarily to the complexity of the ideas themselves.

Through wise word choice the writer controls the difficulty of ideas for the reader. It is important to choose words that will reduce the risk of misunderstanding.

Choose short words. The best known words usually are short words. Familiar words put the least strain on readers. There is a short word for nearly every long word. If it serves the purpose use it:

Don't Use Words Like:

Assistance
Subsequent
Anticipate
Perform
Sufficient
Additional

Use:

Help
Later
Expect
Do
Enough
More

Long words sometimes are elegant and are considered evidence of a good vocabulary, but they slow down reading. In directives we need words that can be read and understood quickly. Use short words; in most cases, they will do everything longer words will do, and will do it better.

Use action verbs. Writers often slow up the action in their writing by using verb-phrases instead of single-word verbs. Verb phrases are often just a wordy way of stating a simple action.

Instead of saying:

Simply say:

<u>are</u> related	relate
<u>have</u> knowledge	know
<u>take</u> a count	count
<u>give</u> instruction	instruct
<u>hold</u> a discussion	discuss
<u>make</u> an estimate	estimate

If you want the reader to see the action, state it as simply as possible - use a single action verb. Stay away from phrases.

Use concrete nouns. Always use the most specific word you can think of under the circumstances. General words do not convey precise meaning. They nearly always have several possible meanings, and your reader has to make a choice of meaning. It may not be the same as yours.

Don't say:

If you mean:

directive	leave manual
communication	letter
vehicle	car
storage structure	grain elevator

If the reader misunderstands when you use a specific term, it may be his fault. But if he misunderstands when you use a general term, it probably is your fault. However, there is a time and place to use a general word in place of a specific word. Use the word that most accurately reflects your meaning.

Use parallel construction. What is parallel construction? In sentences, it is expressing like ideas in like manner. It means using the same part and form of speech to express one idea that we use to

express similar ideas. When we use the same kinds of words and construction to express similar ideas, the similarity is quickly apparent; when we use different ones, it is not. Parallel construction speeds reading.

Wrong: These property accounts form the basis for accurate recording, reports and interpretation of property information.

Right: These property accounts form the basis for accurately recording, reporting and interpreting property information.

Wrong

1. Records creation
2. Maintaining records
3. Disposition of records

Right

1. Records creation
2. Records maintenance
3. Records disposition

Use careful cross references. Cross-references, when properly used, help readers find and follow. That is very important in directives writing. Many directives do not tell the whole story. Sometimes related bits are in a number of different directives.

When should you cross-reference? When the reader has to have the information from other directives in order to carry out or complete a required action. When the reader may not know or find the needed information unless you direct him to it. Do not cross-reference within the same directive unless the same kind of need exists, and when headings and indexes will not lead the reader to it. Never cross-reference merely to tell the reader where he can find interesting material.

How should you cross-reference? Always give the reason. Do not leave the reader wondering whether he should consult the cross-referenced text or whether he can skip it. Don't just say "See 1 AR 524;" say "For complete instructions on use of this form, see 1 AR 524." Otherwise, how will the reader know what is in the referenced material? And why should he bother to read it? Readers are cynical; they have learned that cross-references often lead to unneeded information.

Keep sentences short. Experience shows that short sentences are more effective than long sentences. Readers like them. They deliver

meaning in bite-size, easy-to-digest pieces. Directives need this more than any kind of writing. However, do not shorten a sentence at the expense of meaning and clarity.

History shows that sentences are getting shorter. In Shakespeare's day, the average sentence was 60 words long. The ability to string ideas endlessly into a single sentence was the mark of a skilled writer. And to understand it was the mark of a skilled reader!

In Dicken's day, the average was 45 words. The average for USDA agencies, today is 23 words, and some agency procedures still contain sentences of one hundred words or more. The average should be 15 to 17 for easy reading.

Keep paragraphs short. The corollary to the short sentence is the short paragraph. Aim for paragraphs that do not exceed 7 to 10 lines. As a rule, subordinate paragraphs should be slightly shorter than main paragraphs. Aim for subparagraphs that do not exceed 5 to 7 lines. Do you think this standard is too severe?

Question: What are your own thoughts when your search leads you to a long, dense paragraph?

Answer: You think, "This is going to be tough."

Question: What do you think when you come to a short paragraph?

Answer: You think, probably with a feeling of relief, "This is going to be easy."

However, be careful about artificial paragraph separations in order to give the appearance of shortness. Proper paragraphing calls for true separation of ideas.

Keep directives short. The same rules of brevity and idea separation that apply to sentences and paragraphs, also apply to a directive as a whole. Readers want all the information they need, but they want it stated as briefly as possible. Some good examples of brevity are the Lord's Prayer: 50 words; Lincoln's Gettysburg Address: 266 words; The Ten Commandments: 297 words. Contrast these with an order issued by the Office of Price Stabilization, covering the price of a head of cabbage. It contained 26,297 words.



Chapter 4

FUNCTIONAL GRAPHICS

In the modern directive, graphics are regarded as extensions of the text, not as mere picture supplements. Used properly, graphics amplify and replace text. They should be used whenever they will do a job better than text will. Some common names for directives-graphics are: Illustrations, exhibits, figures, examples, attachments, etc. In USDA, the word exhibit is used the most.

Use right graphics. Pick the graphic that will do the job best. "John Doe" forms probably are our commonest graphic. Also the most useful. A "John Doe" form is one which illustrates entries and often explains them in balloons, boxes or marginal text. Blank, or sample, forms are not true graphics, and should not be represented and treated as graphics. Other types of graphics are:

Schematic drawings	Pie Charts	Flow charts
Line drawings	Cartoons	Photographs
Line and bar charts	Exploded views	Fold-aways

DESIGN GRAPHICS CAREFULLY

Make graphics complete. A graphic usually represents or illustrates a segment of a directive, not a whole directive. Yet a graphic must, like a directive, do completely what it sets out to do. A graphic that represents an approved design must show (or account for the absence of) all required details. A John Doe form that gives copy-and-distribution information must give the whole story. Don't divide information, willy-nilly, between graphic and directive. Decide where each kind of information should be placed; then see that each is complete.

Keep graphics simple. Too much information clutters graphics. It makes them hard to use. It may result in misunderstanding and errors. If a lot of information or special detail is needed, break it up into several related graphics. If detail is very fine and

important, give it "exploded" or "magnifying glass" treatment, either separately or superimposed on the main graphic.

Label all graphics. Graphics need labels for the same reason that paragraphs need headings - to provide a reference "handle," and to help in locating. A John Doe form may need further identification, such as the specific use illustrated. Major segments of graphics often need separate labels.

LINK TEXT AND GRAPHICS

Graphics usually have a close working relationship with a particular piece of text. We said that the graphic was an extension of the text. It follows, then, that we want to firmly link the graphic to the text, so the reader cannot overlook or lose either. There are several things you can do to link them effectively; you can:

1. Locate your graphic near the related text;
2. Refer to each graphic in the related text;
3. Identify the related text on each graphic;
4. Index major graphics.

Let's take these one at a time.

1. Locate graphics near related text

Readers consult graphics more readily when they are located close to the text. If you locate them too far away from the text, readers won't use them. The best location for a graphic, such as an illustration, is immediately following the related text.

However, sometimes a graphic relates to several widely separated texts. In that case, you must cross-reference the affected texts, or locate the graphic at the end of the chapter or part that embraces most of the texts. Sometimes, for that reason, all graphics are placed in a single location in a manual, where they are serially numbered and indexed for reference.

However, most directives writers (or systems) overlook opportunities to put small, useful illustrations right next to

related text, where it can be found with little effort.

2. Refer to graphics in related text

Every graphic should be referred to in a text. In other words, references in the text should direct the reader to the graphics he needs, just as text-references direct him to other text. Never issue graphics independent of text.

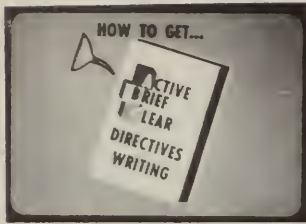
3. Identify the related text on each graphic

Put a text-reference on every graphic that is separated from the text. In general such graphics should list the texts that carry specific references to them and prescribe their use. That not only provides the needed two-way link between text and graphics; it gives better control over cross-references in event of revision or deletion of either the text or the graphic.

Put text references on graphics in a standard location. In most systems, that is in the upper-right corner, under the graphic identification number. In some systems, such information is centered on the top of the graphic.

4. Index major graphics

All major graphics should be indexed, in the same way that major segments of text are indexed. That means listing them in tables of contents and in alphabetic indexes. Readers need indexes to help them find graphics, just as they need them to find text. In some systems, writers contribute suggested index entries; in other systems the directives staff does the whole job, or makes other provisions for indexing.



Chapter 5

HOW TO GET ACTIVE, BRIEF, CLEAR DIRECTIVES

Our goal is active, brief, and clear directives - directives that are alive with action and that get action; directives that are short and lean with no fat; directives whose meaning is clear and unmistakable to all readers. How do we get directives like that?

Up to this point, we have covered some very general rules in writing. Now we will talk about some specific steps which you can take to improve your writing and help you get better directives. It will pay you to remember and apply these steps as you write.

STEPS IN DIRECTIVES IMPROVEMENT

Step 1 - PROVIDE NEEDED HEADINGS

Writers have an obligation to prepare directives in a way that will help readers find and follow. That means putting into your writing clear signs that tell the reader quickly where he is and where he is headed. The signs will help him get there quicker. The best signs you can use are headings.

Headings add greatly to the efficiency and usefulness of a directive. If you have the user's interest at heart, you will make an extra effort to provide good headings. Headings are a good investment.

Headings cut the cost of directives by letting users determine at a glance whether they want, or need, to read the text. Without the heading, they must read the text.

Headings make directives self-indexing. This is one of the qualities of all good modern directives. Headings quickly reveal the outline plan of the directive. They enable the reader to find the guidance he wants.

Headings shorten text. Information in headings often does not need to be repeated or explained in text. The reader knows you are writing about the things in the heading. In directives writing, this is called "leaning on the heading."

When do you provide a heading? Generally, every unit of text that runs over three lines deserves a heading. Other good rules to follow in providing headings are to:

Keep headings short; try not to run over a single line.

Avoid single-word headings like "general," "policy," "responsibilities," "requirements." That kind of word usually needs modification, to be clear.

Do you sometimes find it hard to create a heading? If you do, remember:

A good paragraph has a topic sentence. Topic sentences usually contain the words you need for a good heading.

A good paragraph has a "paragraph idea" built into it, which also provides clues for your heading.

If you have a poorly constructed paragraph, you probably will have trouble creating a good heading.

Step 2 - WRITE ACTIVE SENTENCES

The active voice shortens sentences 20% to 35%. It is demonstrated, over and over, in workshop practice sessions. Watch for inactive sentence construction, like you see here.

"A. Sentences should be kept short.

B. Fifteen-word average sentences should be the aim of writers.

C. Short sentences are liked by readers."

When you find inactive sentences like those, activate them simply by changing the verb construction, as in the following sentences:

"A. Keep sentences short.

B. Aim for sentences averaging fifteen words.

C. Readers like short sentences."

In this simple example, we shortened the total text by 39%, merely by changing to the active voice. But brevity isn't the only benefit from use of the active voice; the meaning, itself, often is stronger and clearer.

Step 3 - LIMIT SENTENCES TO ONE THOUGHT

Most sentences are long because they contain too many ideas. Any sentence is easier to read and understand if it contains only one idea.

What do you think of this sentence? "Advance sick leave may be granted upon the employee's request, however, the approval of each period of absence must be documented by memorandum or on SF-1130." Yes, it's long because it contains two complete ideas. What happens when we separate these ideas into sentences?

"Advance sick leave may be granted upon the employee's request. The approval of each period of absence must be documented by memorandum or on SF-1130."

We have lost no meaning and we have gained some readability.

When you write, present your complex ideas, if they are necessary, in a series of simple sentences. Don't string them together in a single sentence. To identify compound sentences, look for conjunctions, such as: and, but, hence, therefore, and internal punctuation, such as commas and semicolons.

LIST CONDITIONS, EXCEPTIONS, STEPS, SEPARATELY

This is not a step; it is simply an extension of the principle of limiting sentences to one thought. Many sentences are unnecessarily long, because they contain conditions, exceptions or steps. For example, look at this sentence:

"When it is established that cost is not a prime factor and time is of the essence, destinations are known; where it is an

isolated transaction and that only less than carload or less than truckload lots will be procured under a contract, bids should be solicited on an F.O.B. destination basis."

Notice how hard it is to separate and identify the ideas? And how long the sentence is? That sentence is burdened with too many ideas.

Now let's look at the same information with the conditions listed separately:

"Bids should be solicited on an F.O.B. destination basis when:

- a. Cost is not a prime factor.
- b. Destinations are known.
- c. It is a case of an isolated transaction.
- d. Time is of the essence.
- e. Only less than carload, or less than truckload, lots will be procured under a contract."

Is there any doubt that this statement is easier to read? The conditions easier to identify? This technique helps magnify important details that are often buried in text.

Step 4 - CUT USELESS WORDS AND INFORMATION

A great many of our directives contain more words and information than are needed to make them clear. This makes them long and hard to read. Writers often feel that they are adding meaning when they add words. Sometimes this simply hides the real meaning and loses the reader. Look at this example, a 46 word sentence:

"The purpose of this manual is to provide information pertaining to regulations, policies, and procedures that are applicable to the administration of leave which may accrue to and/or be granted to employees of this agency holding appointments in the several categories of the Federal service."

Do you think such writing is uncommon? It isn't. But it reflects a discredited standard of writing - what some people call Governmentese. We can do better. For example:

"This manual provides information on leave policies and procedures applicable to the Federal employees of this agency."

Is the meaning still clear? The elimination of 29 words resulted in a reduction of 63%. That illustrates what we mean by cutting useless words and information.

Remember: Stick to information the user needs to do the job! Don't try to make an encyclopedia out of each directive.

Step 5 - REVIEW AND EDIT

Every directive should have a systematic review before publication to make sure it is sound and well written. It should be carefully checked for:

Completeness and accuracy.

Soundness of procedure.

Quality of presentation.

Conformance with system standards.

Who is responsible for checking the directive?

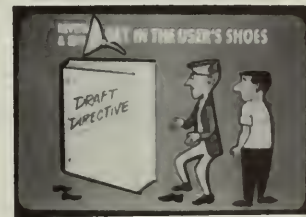
Agencies have various arrangements for reviewing, clearing and approving directives. Usually, agency procedure spells out the responsibilities of editorial staffs, policy staffs and line officials, for these actions. Despite certain distinctions as to the purpose of these actions, each one carries definite review responsibility.

Every reviewer of a directive has an obligation to appraise - at least in his own area of interest - (1) the accuracy of facts, (2) the soundness of policies and procedures, and (3) clarity of statement. Review should be regarded as a responsibility, not a privilege.

However, too often, writers and reviewers do this part of the job in haste. They leave it to others to find flaws and negotiate improvement. This practice is responsible for many faulty directives. Every review should be a good review.

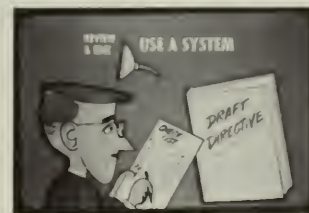
However, the writer has the major responsibility to thoroughly review his work. The first-rate directives writer is a craftsman. He should set high standards for his work, and check his writing against them.

REVIEW FROM USER'S VIEWPOINT

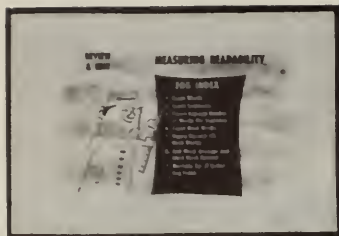


To be sure you have written something users can follow with ease, put yourself in their shoes. Look at the draft as if you had to carry out its instructions. Or, better yet, get representative users to look at the draft and tell you if you have succeeded.

REVIEW SYSTEMATICALLY



Be systematic in reviewing your draft directive. If you can, check your writing against a standard guide, such as the "Action Checklist For Directives Writers," contained in this Guide. For checking on readability, use the Fog Index.



Chapter 6

MEASURING READABILITY

Robert Gunning, in his book "The Technique of Clear Writing," provides a formula for measuring difficulty of reading. He calls it the "Fog Index." He relates the amount of "fog" in a given text, to the number of years of schooling which it would take to read it with ease. Mr. Gunning has given the Department of Agriculture written permission to use Form AD-371, Fog Index Readability Appraisal.

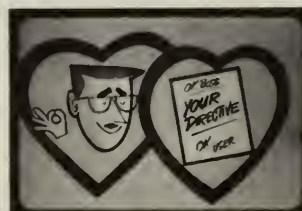
This form incorporates Gunning's Fog Index Formula, with changes to cover special practices found in USDA directives writing. It is stocked in Central Supply Section, USDA.

The Fog Index does not give an infallible measure of reading difficulty. If the ideas, or words, are totally unfamiliar to the reader, he will still find reading difficult, no matter how low the Fog Index. And no amount of education will make some writing easy to read. But it does give a relative indication of how easy, or how hard, any writing is to read, and it tells when improvement is needed.

CONCLUSION

Good directives are hard to write. But the job will be much easier for the writer who uses the simple techniques set forth in this Guide. Practice will help make the use of these techniques - and good writing - a habit.

Write every directive
for this double - o. k.



Appendix

1. Form AD-371, Fog Index Readability Appraisal
2. Fog Index Factor Table
3. Action Checklist For Directives Writers
4. Writing Problem (Practice Steps In Directives Improvement)
5. Directives Annual Cost Computation Table
6. Directives Page Cost Computation Table
7. Selected Bibliography

FOG INDEX

Readability Appraisal

Item: _____

Text Scored: _____

1. NUMBER OF WORDS _____
(Do not count words in headings unless continuous with text.
Treat as one word: hyphenated words, numbers, abbreviations,
and other symbols.)
2. NUMBER OF SENTENCES _____
(Count units which end in a period or question mark. In vertical
listings, count the introduction and each item as a separate sen-
tence, regardless of punctuation used.)
3. AVERAGE NUMBER OF WORDS PER SENTENCE _____
(Item 1 divided by item 2.)
4. NUMBER OF HARD WORDS _____
(Treat as hard words all words of 3 or more syllables, abbre-
viations and symbols. Do not count capitalized words, unless
symbolized or abbreviated.)
5. PERCENT OF HARD WORDS _____ %
(Item 4 divided by item 1.)
6. SUM OF WORD AVERAGE AND HARD WORD PERCENT _____
(Item 3 plus item 5.)
7. FOG INDEX _____
(Item 6 multiplied by 0.4.)

*The FOG INDEX measures readability of a given text in terms of
years of schooling needed to read it with ease. A Fog Index of
12 is a desired standard for Government administrative writing.*

COMMENTS

DATE

REVIEWER

See instructions on reverse.

HOW TO USE THIS FORM:

- (a) "ITEM" – Insert the name or title of the document being appraised, such as a directive, a letter, or a report.
- (b) "TEXT SCORED" – Insert a description of the exact unit of text chosen, such as a paragraph, a page, or other unit. Choose a sample of text with at least 100 words for long documents. Analyze short documents (*one-half page or less*) completely.
- (c) Follow the seven steps listed on the front of the form. Record the product of each step, including the Fog Index.
- (d) "COMMENTS," "DATE," and "REVIEWER" – Complete and use the Readability Appraisal as desired or as your agency directs.

HOW TO LOWER THE FOG INDEX:

- (a) Use simple words.
- (b) Write in the active voice.
- (c) Write short sentences.
- (d) Limit sentences to one thought.
- (e) Cut useless words and information.

The Fog Index does not tell how to simplify writing; it merely signals when it is needed. Do not seek a low Fog Index at the expense of soundness and clarity. Get the lowest Index you can, consistent with your writing goal.

This form is based on Robert Gunning's Fog Index Formula, from "The Technique of Clear Writing," McGraw-Hill Book Co., Inc.

AD-371

FOG INDEX FACTOR TABLE

(Based on Robert Gunning's Fog Index Formula)

AVERAGE NUMBER OF WORDS IN A SENTENCE	PERCENT OF DIFFICULT WORDS															EASY READING RANGE	DIFFICULT READING RANGE
	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5		
40	24	23	23	22	22	22	21	21	20	20	20	19	19	18	18	College graduate	
39	23	23	22	22	22	21	21	20	20	20	19	19	18	18	18		
38	23	22	22	22	21	21	20	20	20	19	19	18	18	18	17		
37	22	22	22	21	21	20	20	20	19	19	18	18	18	17	17		
36	22	22	21	21	20	20	20	19	19	18	18	18	17	17/16	16		
35	22	21	21	20	20	20	19	19	18	18	18	17	17/16	16	16	College senior	
34	21	21	20	20	20	19	19	18	18	18	17	17/16	16	16	16		
33	21	20	20	20	18	18	18	18	18	17	17/16	16	16	16	15	College junior	
32	20	20	20	19	19	18	18	18	18	17	17/16	16	16	16	15		
31	20	20	19	19	18	18	18	17	17/16	16	16	16	15	15	14	College Sophomore	
30	20	19	19	18	18	18	17	17/16	16	16	16	15	15	14	14		
29	19	19	18	18	18	17	17/16	16	16	16	15	15	14	14	14		
28	19	18	18	18	17	17/16	16	16	16	15	15	14	14	14	13	College freshman	
27	18	18	18	17	17/16	16	16	16	15	15	14	14	14	13	13		
26	18	18	17	17/16	16	16	16	15	15	14	14	14	13	13/12	12		
25	18	17	17/16	16	16	16	15	15	14	14	14	13	13/12	12	12	High-school sr.	
24	17	17/16	16	16	16	15	15	14	14	14	13	13/12	12	12	12		
23	17/16	16	16	16	15	15	14	14	14	13	13/12	12	12	12	11	High-school jr.	
22	16	16	16	15	15	14	14	14	13	13/12	12	12	12	11	11		
21	16	16	15	15	14	14	14	13	13/12	12	12	12	11	11	10	High-school soph.	
20	16	15	15	14	14	14	13	12/12	12	12	12	11	11	10	10		
19	15	15	14	14	14	13	13/12	12	12	12	11	11	10	10	10		
18	15	14	14	14	13	13/12	12	12	12	11	11	10	10	10	9	High-school fresh.	
17	14	14	14	13	13/12	12	12	12	11	11	10	10	10	9	9		
16	14	14	13	13/12	12	12	12	11	11	10	10	10	9	9/8	8	Eighth grade	
15	14	13	13/12	12	12	12	11	11	10	10	10	9	9/8	8	8		
14	13	13/12	12	12	12	11	11	10	10	10	9	9/8	8	8	8	Seventh grade	
13	13/12	12	12	12	11	11	10	10	10	9	9/8	8	8	8	7		
12	12	12	12	11	11	10	10	10	9	9/8	8	8	8	7	7	Sixth grade	
11	12	12	11	11	10	10	10	9	9/8	8	8	8	7	7	6		
10	12	11	11	10	10	10	9	9	8	8	8	7	7	6	6		

The chart shows how changes in the average number of words per sentence - or the percent of difficult words - affect the Fog Index. Changes in the Fog Index reflect changes in ease-of-readability.

DIRECTIVES IMPROVEMENT WORKSHOP

ACTION CHECKLIST FOR DIRECTIVES WRITERS

A. PLANNING

- (1) Verify assignment
- (2) Determine type of issuance
- (3) Identify primary users
- (4) Determine deadlines
- (5) Schedule worksteps
- (6) Collect information
- (7) Outline text
- (8) Plan graphics
- (9) Select writing format

C. GRAPHICS

- (1) Prepare graphics
- (2) Do not duplicate text
- (3) Keep graphics simple
- (4) Make graphics complete
- (5) Number graphics
- (6) Label graphics and major segments
- (7) Locate near text
- (8) Cross-reference with text
- (9) Index major graphics

B. WRITING

- (1) Rough-draft text
- (2) Limit paragraphs to one idea
- (3) Provide needed headings
- (4) Limit sentences to one thought
- (5) List conditions, exceptions,
steps separately
- (6) Write active sentences
- (7) Use simple words
- (8) Use single verbs
- (9) Use concrete nouns
- (10) Use parallel construction
- (11) Give needed cross-references

D. REVIEW AND EDIT

- (1) Edit draft
- (2) Check completeness
- (3) Check accuracy
- (4) Check for sound procedure
- (5) Cut useless words and information
- (6) Keep sentences short (15 words)
- (7) Keep paragraphs short (10 lines)
- (8) Measure readability (Fog Index)
- (9) Check with users
- (10) Make needed corrections
- (11) Obtain clearances and approvals

Writing Problem / STEP 1

The Problem Paragraph

STEP ONE: Provide needed headings

13. *USING CHECKLIST TO UP-DATE DIRECTIVES FILES.*

13. Identification of copies of directives not located in the directives file, but listed on the checklist of current directives under the distribution (mailing) code indicating that copies were distributed to the organizational element maintaining the file, shall be made, and copies of missing directives shall be obtained from the appropriate stock source and filed in the directives file. In addition, identification of copies of directives not listed on the checklist of current directives, but located in your directives file, shall be made, and those copies of directives shall be removed from the files and destroyed

FRAME OF REFERENCE FOR PARAGRAPH 13. Paragraph 13 is part of a directive which covers the issuance, distribution and maintenance of directives. The directive provides for the periodic issuance of checklists of current directives. It describes a checklist and explains the use of distribution codes. Paragraph 13 deals with a final phase of the overall directive, and it lacks a heading.

INSTRUCTIONS:

- (1) Consider frame of reference
- (2) Read the problem paragraph
- (3) Underline key words and phrases
- (4) Construct a heading

Writing Problem / STEP 2

The Problem Paragraph

STEP TWO: Write active sentences

13. USING CHECKLIST TO UP-DATE DIRECTIVES FILES.

IDENTIFY

Identification of copies of directives not located in the directives file, but listed on the checklist of current directives under the distribution (mailing) code indicating that copies were distributed to the organizational element maintaining the file, shall be made,

OBTAIN

and copies of missing directives shall be obtained from the appropriate stock source and filed in the directives file. In

FILE

addition, identification of copies of directives not listed on the checklist of current directives, but located in your directives file, shall be made,

REMOVE

and those copies of directives shall be removed from the files and destroyed.

DESTROY THEM

Writing Problem / STEP 3

The Problem Paragraph

STEP THREE: Limit sentences to one thought

13. USING CHECKLIST TO UP-DATE DIRECTIVES FILES.

(A)

Identify copies of directives not located in the directives file, but listed on the checklist of current directives under the distribution

(mailing) code indicating that copies were distributed to the organizational element maintaining the file, and ^(B)obtain copies of missing

^(C)directives from the appropriate stock source and file in ^(D)the directives file.

In addition, identify copies of directives not listed on the checklist of current directives, but located in your

^(E)directives file, and remove those copies of directives from the files and destroy them.

Writing Problem / STEP 4

The Problem Paragraph

STEP FOUR: Cut useless words and information

13. USING CHECKLIST TO UP-DATE DIRECTIVES FILES.

- A Identify copies of directives not located in the directives file, but listed on the checklist of current directives under the distribution (mailing) code indicating that copies were distributed to the organizational element maintaining the files.
- AND FILE - YOUR
- B Obtain copies of missing directives from the appropriate stock source.
- C File in the directives file.
- C ~~D~~ In addition, identify copies of directives not listed on the checklist of current directives, but located in your directives file.
- AND DESTROY
- D ~~E~~ Remove those copies of unlisted directives from the files and destroy them.

Writing Problem / STEP 5

The Problem Paragraph

STEP FIVE: Review and edit

13. USING CHECKLIST TO UP-DATE DIRECTIVES FILES.

- A Identify directives not in your file, but listed under your code.
- B Remove and destroy unlisted directives.
- C Obtain and file missing directives.

Does it provide a sound procedure?

Does it give the user all the information he needs?

Does it give the information in the sequence the user needs?

Is it clear and understandable? Could it be restated?

Writing Problem / FINAL 6

The Problem Paragraph

BEFORE -- \$720.00 for 4,000 Users.

13. Identification of copies of directives not located in the directives file, but listed on the checklist of current directives under the distribution (mailing) code indicating that copies were distributed to the organizational element maintaining the file, shall be made, and copies of missing directives shall be obtained from the appropriate stock source and filed in the directives file. In addition, identification of copies of directives not listed on the checklist of current directives, but located in your directives file, shall be made, and those copies of directives shall be removed from the files and destroyed.

WORDS-95 SENTENCES-2 WORD AVERAGE-48 HARD WORDS-21 FOG INDEX-28

The Problem Paragraph

AFTER -- \$120.00 for 4,000 Users.

13. USING CHECKLIST TO UP-DATE DIRECTIVES FILE.

- A Identify directives not in your file, but listed under your code.
- B Remove and destroy unlisted directives.
- C Obtain and file missing directives.

WORDS-21 SENTENCES-3 WORD AVERAGE-7 HARD WORDS-5 FOG INDEX-12

DIRECTIVES IMPROVEMENT WORKSHOP

DIRECTIVES ANNUAL COST COMPUTATION TABLE
(Worked Out For Hypothetical Agency)

A. PUBLISHING COST:

- | | | |
|--------|--------------|---|
| (1) \$ | 400. | - Estimated cost per page to plan, write and issue. |
| (2) X | <u>5,000</u> | - Estimated number of pages issued per year. |
| (3) \$ | 2,000,000 | - COST PER YEAR OF WRITING AND PUBLISHING DIRECTIVES. |

B. FIRST READING COST:

- | | | |
|--------|--------------|--|
| (1) \$ | .12 | - Average reading cost per page, per person. |
| (2) X | <u>5,000</u> | - Estimated number of pages issued per year. |
| (3) \$ | 600. | - First reading cost for one person, all directives. |
| (4) X | <u>4,000</u> | - Median number of readers. |
| (5) \$ | 2,400,000 | - TOTAL FIRST READING COST. |

C. ANNUAL USING COST:

- | | | |
|--------|--------------|---|
| (1) \$ | .133 | - Prorated using cost per page, per person, per year. |
| (2) X | <u>5,000</u> | - Estimated number of pages issued per year. |
| (3) \$ | 665. | - Using cost per person, per year. |
| (4) X | <u>4,000</u> | - Median number of users. |
| (5) \$ | 2,660,000 | - TOTAL USING COST. |

D. SUMMARY:

- | | | |
|-------------------------|----|-------------------|
| (1) Publishing Cost: | \$ | <u>2,000,000.</u> |
| (2) First Reading Cost: | | <u>2,400,000.</u> |
| (3) Annual Using Cost: | | <u>2,660,000.</u> |
| (4) TOTAL ANNUAL COST: | \$ | <u>7,060,000.</u> |

E. SUGGESTED COMPUTATION FACTORS:

- | | |
|-----------------------|---|
| (1) \$400. | - Estimated cost per page to plan, write and issue. |
| (2) 3 minutes | - Time required to read average page of directive. |
| (3) 4¢ per minute | - Average pay rate, \$2.50 per hour. |
| (4) 12 ¢ | - Reading cost per page, per person. |
| (5) 3 years | - Estimated lifetime of average directive page. |
| (6) 10 minutes | - Three-year reference time, per page. |
| (7) 3-1/3 minutes | - One-year reference time per page. |
| (8) 40 ¢ | - Three-year using cost, per page, per person. |
| (9) 13.3 ¢ | - One-year using cost, per page, per person. |
| (10) Median Audience- | Average annual distribution of all directives. |

Change above factors, as desired, to reflect user experience.

DIRECTIVES IMPROVEMENT WORKSHOP

DIRECTIVES PAGE-COST COMPUTATION TABLE (Worked Out For Problem Paragraph 13)

A. PUBLISHING COST:

(1)	\$	10.	-	Estimated cost per line, to plan, write and issue.
(2)	X	9	-	Number of lines of text.
(3)	\$	90.	-	PUBLISHING COST OF SELECTED TEXT.

B. USING COST:

(1)	\$.0125	-	Estimated lifetime (3 yr.) using cost, per line.
(2)	X	9	-	Number of lines of text.
(3)	\$.1125	-	Using cost per person.
(4)	X	4,000	-	Estimated number of users.
(5)	\$	450.	-	TOTAL USING COST.

C. WEIGHTED COST:

(1)	\$	450.	-	Unweighted using cost, Item B(5).
(2)	%	.40	-	Percent that text is over/under Fog Index of 20.
(3)	\$	180.	-	Amount of adjustment.
(4)	\$	630.	-	Weighted using cost.
(5)	\$	90.	-	Publishing cost.
(6)	\$	720.	-	TOTAL ADJUSTED PAGE COST:

EXPLANATION OF TABLE: The same factors are used to compute the cost of a single directive or part of a directive as are used to compute total annual directives cost. The factors are simply reduced from a page-cost basis to a line-cost basis.

- A. The "standard" \$400. per page issuance cost is converted to \$10.00 per line, since studies have shown that most directives average about 40 - 6½" lines of text for each full page.
- B. An estimated three-year (average lifetime) using cost of 50 cents is either used fractionally, or is converted to 1½ cents per line. This is multiplied first by the number of lines of text, then by the estimated number of readers.
- C. The using-cost arrived at in Step 2 is adjusted or "weighted" by the percent the Fog (readability) Index is over or under an arbitrary average of 20. Addition of the publishing cost gives the total adjusted page cost.

Change above factors, as desired, to reflect experience.

DIRECTIVES IMPROVEMENT HANDBOOK

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"Think like a wise man, but communicate in the language of the people."

William Butler Yeats

